EMPIRE STATE HONEY PRODUCERS ASSOCIATION

A Statewide Organization to Promote and Protect Interests of New York State Beekeepers

FDA Commissioner Jane Henney
5630 Fishers Lane
Room 1061 (HFA-305)
Rockville
MD 20852

26th January 2001

Dear Commissioner Henney,

As secretary of the Empire State Honey Producers Association (ESHPA), I have been instructed to inform you that the enclosed two resolutions were approved at our annual fall meeting on 3rd November 2000. Our membership is concerned about the safety of genetically modified (GM) crops, and their effects on honeybee colonies.

The first resolution resulted from my investigation into the literature on GM crops. I came across two references in college level science textbooks to tetracycline resistant genes being used in GM crops. This led me to construct a possible scenario whereby horizontal gene transfer might be responsible for American Foulbrood resistance that developed in three countries over a short time period. Subsequent searching of various information sources has failed to confirm that a tetracycline resistant gene is present in GM crops, though it may be recorded in CBI databases that I do not have access to.

The second resolution developed as a consequence of some French research that was published by Picard-Nizou et al. (1997). The results discussed in this paper indicate that insecticidal components of GM crops may have harmful effects on honeybees that are not picked up by short-term toxicity tests on adult honeybees. I understand that GM crops aspiring to regulatory approval only need pass short-term toxicity tests. This is troubling, as colony strength and cohesion are essential for successful overwintering and profitability. Would it be possible for the FDA to request that USDA-ARS develop a more adequate testing protocol? Such a protocol might assess adult bee longevity, olfactory learning response, and brood rearing success ratios. The first two characteristics would not be overly difficult, as the French government research service (INRA) has already worked on this. Two national beekeeping groups, the American Honey Producers Association (AHPA) and US Beekeepers (USB), have recently passed resolutions calling for improved GMO/honeybee toxicity analysis.

I hope that your agency can help alleviate the concerns of ESHPA and many other beekeepers across the nation. Any feedback will be appreciated, and I will convey your reply to our membership.

Yours sincerely,

Joe Rowland

Joe Rowland
Sec./Treas. ESHPA

Picard-Nizou, A.L., R. Grison, L. Olseb, C. Pioche, G. Arnold and M.H. Pham-Delegue. 1997. Impact of proteins used in plant genetic engineering: toxicity and behavioral study in the honeybee. Journal of Economic Entomology 90(6): 1710-1716.

Resolution : Tetracycline-resistant genes in GM crops

Whereas, Tetracycline resistant American Foulbrood (AFB) has been detected recently in the United States, Canada and Argentina; and

Whereas, AFB has the potential to inflict significant damages to the US beekeeping industry; and

Whereas, Some genetically modified (GM) crops contain tetracycline resistant genes, and GM crops were cultivated in the US, Canada, and Argentina in the period during which tetracycline resistant AFB developed; and

Whereas, European research has indicated that horizontal gene transfer from GM canola to bacteria within the intestines of honeybees does occur; therefore, be it

RESOLVED, That ESHPA requests that the FDA conducts research to determine if horizontal gene transfer has occurred between GM crops and AFB.

Resolution: Proteinase inhibitors in GM crops

Whereas, The US beekeeping industry is an important contributor to the US agricultural economy; and

Whereas, Some European research has indicated that proteinase inhibitors found in some genetically modified (GM) crops may have deleterious effects on the lifespan and learning / olfactory capabilities of adult honeybees; and

Whereas, Such effects could cause problems in colony organization, and foraging / pollination efficiency; therefore, be it

RESOLVED, That ESHPA requests that the USDA examines more closely the relationship between proteinase inhibitors in GM crops and honeybees.

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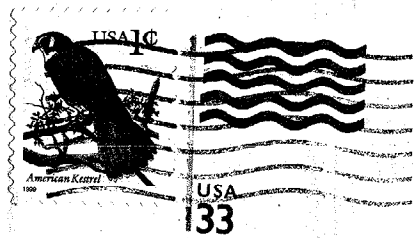

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